



MILAGRES COLLEGE

Kallianpur – 576 114, Udupi District, Karnataka

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DEPARTMENT OF CHEMISTRY

Year: 2017-2018

➤ Faculty

Staff					
Sl.No.	Name of the Staff	Qualification	Status	Designation	Date of Joining the Service
01	Prof. Subramanya Joshi	M. Sc.	Permanent	Associate Professor & HOD	30-06-1983
02	Prof. Joseph Peter Fernnades	M. Sc.	Permanent	Associate Professor	01-07-1984
Lab Asst	Mr. Dinakar Poojary	M.A.	Permanent	Lab Asst	

No. of Students

III B Sc	II B Sc	I B Sc
25	18	36

➤ Action Plan for the academic year 2017-18

1. Bridge course of 15 hrs. duration for I B.Sc. students.
2. Remedial Coaching for the slow learners.
3. Special coaching for the advanced learners for all the B.Sc. students.
4. Seminars for all the B.Sc. students.
5. Use of computers, Internet facilities in the department.
6. Computer Basic training to B Sc. Students.
6. Arranging Guest lectures and extension lectures for the B.Sc. students.
7. Arranging University Level Lecture and Seminar competition in association with Association of Chemistry Teachers of Mangalore University.

8. Arranging special programmes to popularize Chemistry such as science model competition, experiments with principle, science quiz, etc., for high school and P.U.C. students.

9. Arranging visits to chemical factories.

➤ **Action Plan Implemented: Activities Conducted During the Year 2017-2018**

➤ **Curriculum:**

Classes, Laboratory experiments were conducted in accordance with the syllabus prescribed by the Mangalore University-UG course.

➤ **Seminars and Competitions**

Guest Lecture and Chemistry Magic Show: A guest lecture on Chemistry and magic was arranged by the Department of chemistry. Prof. Ronald Mascarenhas, retired professor from Saint Agnes College was the guest. Prof. Subramanya Joshi and Prof. Joseph Fernandes were present during the programme. Dr Vincent Alva, the Principal presided over the programme.

Apart from these the Chemistry Department actively engaged in the Programmes of Science Association of the Year 2017-2018.

Science Association Programmes

Science Association was inaugurated on 26th July 2017 at 3 p.m. in the audio visual hall. The Principal Dr. Vincent Alva presided over the programme. The science association was inaugurated by Prof. Ronald Mascarenhas, retired HOD of Chemistry of St. Agnes College Mangalore. He showed the interesting side of chemistry to the students and the teachers by demonstrating enchanting experiments. Ms. Sushmitha of final B Sc. spoke about the great scientist Late Prof. U.R.Rao. Mr. Sanjay of final year B Sc. welcomed the gathering. Ms. Nirmala of final B Sc. introduced the guest. Ms. Hephzibah of the final B Sc. proposed the vote of thanks. Ms. Vinitha of final B Sc. compeered the programme.

AN INTERACTION WITH ASHLEY ALVA

The Chemistry Department joined hands with the science association to organize a guest lecture on 21st July 2017 in Silver Jubilee hall on the topic "**the scope for pure sciences in USA.**" The Principal Dr. Vincent Alva presided over the programme. The resource person was Ashley Alva who has completed her B.E. in Electronics and instrumentation Engineering from Birla Institute of Technology and Science. She spoke about the scope for masters and research in America. Ms. Jovita Andrade compeered the programme. Mr. Sanjay welcomed the gathering and Ms. Hephzibah proposed the vote of thanks.

TREASURE HUNT

The Chemistry Department along with the Science Association organized a **treasure hunt** for the science students on 06th September 2017 at 12:45pm in the college campus. The students participated in pairs. The students were given clues which lead them to different places where puzzles were given to them. One team was eliminated in each step. Ashraf Ali and Poornesh of first B Sc. won the treasure hunt by finding the treasure first.

SEMINAR COMPETITION

The Science Association along with the help of Chemistry Department conducted a Seminar Competition on 19th January 2018 in the Audio Visual of the College. A total 10 students participated in the competition. Ms. Nirmala of final B Sc. won the prize in chemistry, Ms. Meghana of final B Sc. Won the prize in Physics. And Ms. Kavya of second B Sc. won the prize in Mathematics.

LUCERO 2K18

Science Association and Chemistry Department had organized 'Lucero'- Late V. Rev. Fr G. L. D'Cruz Memorial Competition on 23rd February 2018 under the guidance of Science Association Convener Prof. Joseph Peter Fernandes. 8 colleges participated in the competition. 9 students from each college participated. The Chief Guest was Fr. Lancy Fernandes, Head Master of Milagres High School Kallianpur. Dr. Vincent Alva, Principal presided over the function. The programme began with a prayer song by Smitha and group. Mr. Sanjay Acharya, the President of Science Association welcomed the gathering and Fr Lancy inaugurated the function by spraying chemical solutions and thereafter he delivered his inaugural address. Dr. Vincent Alva, the Principal gave his presidential remarks about the competitions. Ms. Hephzibah Oliver, the Secretary of Science Association proposed the vote of thanks. Ms. Meghana Puthran of 3rd BSc compeered the programme. A total 6 competitions were conducted. Talk Streak- the seminar competition, 4G mind-quiz, Funk from Junk, Paintonics, self debugging and Star Lucero were among them. The valedictory function of the Competition was held in the Silver Jubilee hall at 3.45 p.m. The chief guest of the function was Dr. Gerald Pinto, Principal Emeritus. Three of the participants came forward to give their feedback on the competitions. The chief Guest Dr Gerald Pinto spoke about the humble beginnings of the science department of Milagres college Kallianpur and about how Late V. Rev. Fr G. L. D'Cruz started the science department. He spoke about the achievements of the college. Dr Vincent Alva, the Principal Spoke to the students. Dr. Vincent Alva, Dr. Gerald Pinto and Dean of Science Prof. Subrahmanya Joshi gave the prizes to the winners. The vote of thanks was proposed by Ms. Jivitha of final year BSc. The overall winners of the

competition were poornaprajna college Udupi and runners up was back by Vijaya college mulky.

Validatory Programme of the Science Association

The validity program of science association was held on 26th March 2018 at 3:30 p.m. in the AV hall. Dr Gerald Pinto X principle was the chief guest. During the program Sushmita and Vinita of 3rd BSc gave a PowerPoint presentation on the life and achievements of the scientist Stephen Hawking who recently passed away. Hephzibah III Bsc presented the brief report of the science association. Dr Gerald Pinto was felicitated during the program. Prices are distributed to the winners of various competitions conducted by the science association during the year. Principal Dr Vincent alva gave his presidential remark.

➤ Staff Achievements

Prof. Subramnaya Joshi served as the BOE Members of St. Aloysius College, Mangalore. Prof. Subramanya Joshi assisted the Association of Chemistry Teachers, Mangalore University in the preparation of text books for V and VI semesters. Prof. Joseph Peter Fernandes, appointed as the BOS member of Chemistry (UG) and attended a meeting at Mangalore Univeristy, Mangalagangothri, Konaje. Prof. Joseph peter Fernandes, assisted the Association of Chemistry Teachers, Mangalore University in the preparation of text books for V and VI semesters.

➤ Students Achievements: Student's participation in seminars and competitions.

Students of the Department had a training on Basic Computer Applications, Graphic & web design.

Students under the mango tree participated in programs like poem recitation, speeches, debates, singing, and discussions.

Students participated in Vidyarthi Darbar programmes.

19-06-2017, Orientation programme to the students was held to B Sc. Students. Dr

Thomas Quadros, The Director of Glowinstar Academy, Ambalady was the Chief guest.

21-06-2017: Orientation programme for the fresher's was held. Mr. Manoj Fernandes, Mr.

Dheeraj Sequeira and Ms. Jenice jean Goveas, the Asst Professors from St. Aloysius College, Mangalore were the resource persons.

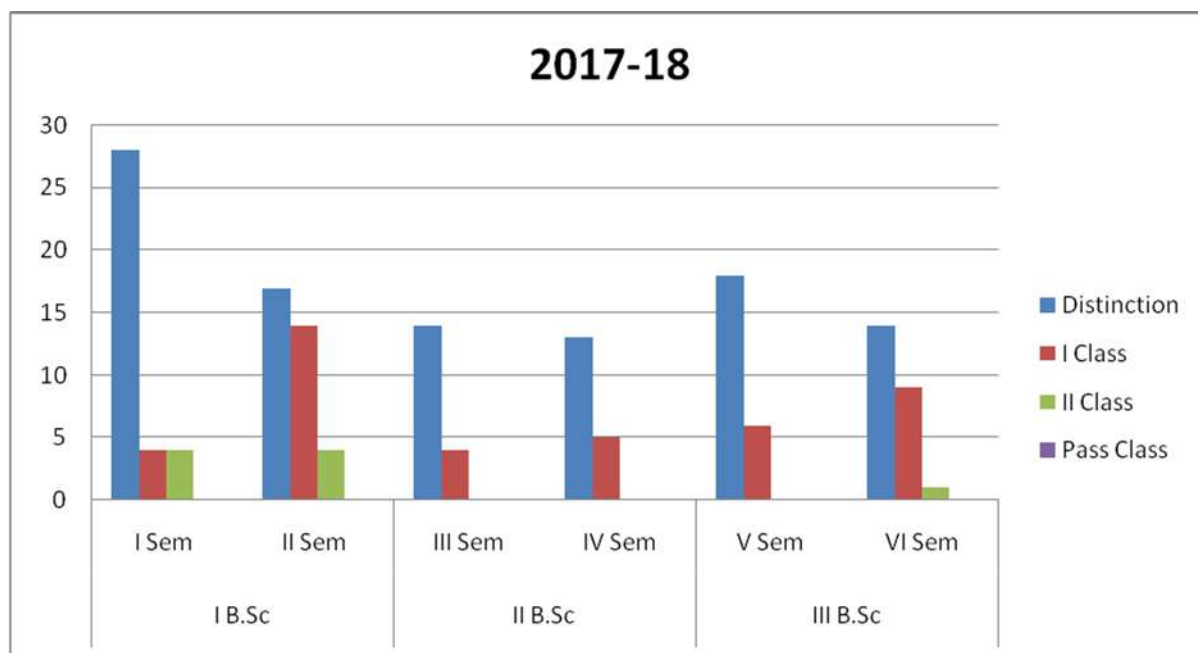
03-07-2018: International Anti Drug Day was observed in collaboration of AV Baliga Hospital, Udupi under the guidance of Dr Nagaraj Moorthi.

Students participated in Awareness programme on the Cigarettes and Other Tobacco Products (COTPA)

➤ Result Analysis: University Examinations

2017-18

CLASS		Total Students	Students appeared	Students Passed	Percentage	Distinction	I Class	II Class	Pass Class
I B.Sc	I Sem	36	36	36	100	28	04	04	0
	II Sem	36	36	35	97.22	17	14	04	0
II B.Sc	III Sem	18	18	18	100	14	04	0	0
	IV Sem	18	18	18	100	13	05	0	0
III B.Sc	V Sem	25	25	24	100	18	06	0	0
	VI Sem	25	25	24	96	14	09	01	0



➤ Laboratory

The department has a full pledged laboratory. The laboratory consists of two required number of equipments/apparatus for the needs of all the students. The laboratory contains safety measures such as fire extinguishers, First aid etc. and is well maintained.

➤ **Best Practices**

1. Opportunity and guidance to all the college/high school students to perform experiment of their choice and interest,
2. Special encouragements to the students in using Departmental Library to acquire additional knowledge in the subject.
3. Going to Schools and teaching them Science

➤ **Planning and Curriculum Delivery**

The assessment of the effective delivery of the curriculum and learning outcome is ensured through bridge course, the periodic interaction with the learners, assignments, class tests, internal assessment tests (mandatory by the University) and university semester examinations.

➤ **Lesson plan**

Teachers prepare monthly plan of the syllabus for each semester to complete the syllabus systematically.

➤ **Department Meetings**

We conduct Dept. Meetings to discuss many issues relating to the curriculum. Staff and the Laboratory Asst meet regularly to discuss the curriculum. Regular meetings were conducted to discuss mode of operation of syllabus, Bridge course, remedial courses, activities of the department etc. Every programme was evaluated during the Departmental meetings. After the announcement of the results/class test the performance of each student was evaluated and the remedial measures were taken.

- ✓ Syllabus - Method of Teaching
- ✓ Conducting Bridge Course
- ✓ Identifying slow learners and remedial coaching
- ✓ Discussion on guest lectures
- ✓ Project for the year and visits to farms, industries, fisher folk, banks etc.
- ✓ Conducting Tests and Seminars
- ✓ Review of syllabus done and students' performance in examinations.
- ✓ Use of modern techniques of teaching
- ✓ Preparation for NAAC visit - Documents to be prepared

✓ **Departmental Library**

Latest editions are available in all the Disciplines of Chemistry are available in the Department Library to have additional Knowledge. Research journals of Chemistry and Environment and Chemistry Today are also available in the College Library. All the books

are used by the students. Mr. Ronald Rajesh Lewis and Mr. Laxman, Alumni of the Department donated a number of books to the Departmental Library.

✓ **Bridge Course**

A bridge course of 10 hours for newly admitted students is conducted every year to I B Sc. Students. The main objective of the course is to bridge the gap between subjects studied at Pre-university level and subjects they would be studying in Graduation. The syllabus was framed. It included the introduction to Chemistry, Fundamentals of Chemistry, basics Information of Periodic table, Atomic Structure, IUPAC Nomenclature and volumetric analysis. At the end of Bridge course a test was conducted and the progress was evaluated. These classes help them to understand the syllabus of I degree better.

✓ **Internal Tests**

Every year we conduct class test/ internal assessment tests to evaluate the learning ability, skills of the students.

The performance of the learners in university examinations is documented in the register of examinations, class test/ internal assessment test scorings are documented in the office for computation of internal assessment marks.

After the evaluation of the internal assessment & university examinations, advanced learners and slow learners are identified and special efforts are made to encourage them.

➤ **Tutorials**

The tutorial work taken by Prof. Joseph peter Fernandes and Prof. Subramnaya Joshi. Two hours of tutorials per week were held. About 20 students were given to each lecturer and the teacher guided the students in both academic as well as co-curricular activities. Timely advice was given to the student/s.

➤ **Advanced learners**

Advanced learners are asked to refer more books from the library and collect more information from online and are motivated to present papers and teach their peers. These students were given text books and asked to prepare notes and help the slow learners. They were made to present papers in class and Seminars with power point presentations and on the board by the traditional methods.

➤ **Slow Learners: Remedial coaching**

These students were given remedial coaching after class hours. Tests were given to these students. They were made to write assignments. Examination question papers were discussed with them. Students benefited from constant tips and revision along with constant instruction on different issues and concepts.

➤ **Teaching Methodology**

Students and staff use modern and Innovative techniques of teaching along with traditional method of chalk and talk.

➤ **Cross Cutting Issues of the Curriculum in the Chemistry Department**

Human Values: Value Education Classes, Communal harmony

Gender : Study Constitution, Co-education college, Respect to others, National Festival Celebrations

Environment and Sustainability: Eco friendly practices in the Lab, Environment Chemistry, Students participate in NCC, NSS, Paddy cultivation, Chemistry in Daily Life.

Professional Ethics: Right usage of knowable to build progressive and development Society, Importance of Higher Education, Lab safety.

➤ **PROGRAMME SPECIFIC OUTCOMES**

The Department gives awareness about the programme outcomes to have an overall idea about the knowledge, skills, abilities and attitudes that students can acquire during the pursuit of UG courses. In the B. Sc programme Chemistry Courses are part. The specific learning outcomes of various courses are built into the curriculum of each programme is available on the Mangalore **University website (www.mangaloreuniversity.ac.in)**. Learning outcomes form an integral part of college vision, mission and objectives.

The Institution communicates the programme and course outcomes to the teachers and students in the following ways:

- Learning Outcomes of Programs and Courses are uploaded on the website of the college.
- Freshers get the required information from the college prospectus, college notice boards and student Handbooks.
- During admission, Students are informed of the courses and their outcomes.

- The outcomes of each programme and the course outcome of each subject are made known to the students by organizing Orientation Programmes.
- The hard copy of the syllabus of each subject with course outcomes is made available in the respective departments for ready reference for the teachers and students.
- Course outcomes are displayed on the departmental notice board.
- Teachers make the students understand the learning outcome of each unit, making the teaching-learning process more fruitful.
- The interactive sessions with successful alumni are organized to guide students to choose programmes to shape their careers.
- Teachers of every department interact with the students about what they are supposed to get at the end of each program.
- Teachers participate in the workshops organized for revising the syllabus of the various subjects under various programmes of the University.
- College puts up the digital flex boards in the prominent area of the college to make the stakeholders aware of the programmes of the college and also highlights students achievements and list the kind of jobs that students can get after completion of the different programs.

➤ **Programme Specific Outcome for Chemistry are,**

- Helps Students to develop skills
- Laboratory Experience
- Scope for Research and Higher Education: M Sc. Ph. D, Bed etc.
- Competitive exams preparation
- Civil service-Entry
- Development of Scientific temper

➤ **Attainment of Course Outcome (CO'S), and Programme Specific Outcomes (PSO's)**

Students are evaluated based on continuous evaluation based on

- Through the Vision, Mission of the College

“To transform youth into responsible citizens and competent professionals through quality education and research.”

- Vision Mission of the Department
- Through their Learning capacity: Slow, average and Advanced Learners
- Exposure to Industry, Field Visits

- Seminars, Projects etc.
- Entrepreneurship awareness.
- Certificate courses and training programmes.
- Experiential learning.
- Coaching for competitive exams (IAS, CET etc.)
- Talent Nurturing programmes in the campus: Soft skill Development
- Course outcomes are measured through the performance of the students in the class, practical, internal evaluations, and external evaluations.

➤ Mentor-Mentee

Every teacher of the department conducts is assigned the responsibility of mentoring a group of students. The teacher interacts personally with the allotted students to know their family background, social and economic status, and their emotional problems if any. These mentees meet mentors regularly to seek advice and share their feelings. Mentors give guidance, and advice to the mentees to improve their performance in the studies, encourage them to participate in extra-curricular activities, prepare them to face the challenges in life and become a successful in life.

Students Progression: 2017-2018

Best Outgoing Students: Ms. Sushmitha Adiga & Ms. Vinitha Crasta



JAM 2018 SCORECARD JOINT ADMISSION TEST FOR M.Sc.			
Indian Institutes of Technology and Indian Institute of Science Bangalore			
CANDIDATE'S DETAILS			
Name: SUSHMITHA			
Registration Number(s): PH104A143			
CANDIDATE'S PERFORMANCE			
Test Paper (Code)	Number of Candidates Appeared in Test Paper	Marks Scored (out of 100)	All India Rank
Physics (PH)	13759	26.0	1219
QUALIFYING MARKS*			
Physics (PH)	GEN 17.05	OBC (NCL) 18.38	SC/ST/PwD 8.53

* A candidate is considered qualified if the Marks Scored are greater than or equal to the Qualifying Marks mentioned for the category for which a valid category certificate, if applicable, is to be produced along with the scorecard.

20-March-2018

Prof. Mathu Varghese
Organising Chairperson, JAM 2018, IIT Bombay

1. Candidates should note that qualifying or being on the merit list of any test paper neither guarantees nor entitles one to admission at IITs and IISc.

2. Candidates who have qualified in JAM 2018 can apply for admission to programs to which they are eligible only in the academic year 2018-19 at IITs and IISc.

3. For admission to various programs, the qualified candidates have to submit admission form ONLINE at the JAM Online Application Processing System website (jam.iitb.ac.in) between 03-April-2018 and 17-April-2018, with all the relevant documents. There is NO need to send a hard copy of the admission form/documents. Only those applications that are complete in all respects and have been properly submitted/accepted within the stipulated time and date will be considered.

4. Upon applying, offers will be made to candidates based on the order of merit, the candidate's choice(s) and the number of seats available at the admitting institutions. Those candidates have to satisfy the Eligibility Requirements (ER) and Minimum Educational Qualifications (MEQs) of the programme(s) of the admitting institution(s). The sufficiency of ER & MEQ is decided by the department offering the programme and the prospective to accept/reject the candidate remains with the department.

5. For latest updates on ER, MEQ and other admission related information, candidate must refer to the JAM 2018 official website, <http://jam.iitb.ac.in>, and the Information Brochure available there.

6. The authenticity of the contents of this Scorecard may be verified with the Organising Chairperson, JAM 2018, IIT Bombay, IIT Bombay, Powai, Mumbai, 400075.

7. Information given in this Scorecard should not be used by any person/institution without prior permission of the Organising Chairperson, JAM 2018.

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Ms. Sushmitha Adiga, was Declared Best Outgoing Student of the Year 2017-2018. She cleared Joint admission test for Masters (JAM) 2018 with All India rank: 1219.



**Jovita Andrade, Participated in Republic Day Parade as a NCC cadet.
She has done her M Sc. Criminology and Forensic Sciences.**

Pragathi	B Sc.	Infosys
Hephzibah Princy Oliver	B Sc.	Infosys
Nirmala	B Sc.	Toyota
Vinitha Crasta	B Sc.	Toyota
Sushmitha Adiga	M Sc. Physics- JAM	Lecturer, UPSC preparations
Jovita Andrade	M Sc. –Criminology & Forensic Sciences	Rajasthan







